EXHIBIT A 2009 GDRCo Salmon Creek Road Decommissioning Project

Statement of Work

Under direction of the Department of Fish and Game, and under the following conditions and terms, the Pacific Coast Fish, Wildlife and Wetlands Restoration Association will:

- 1. Improve spawning and rearing habitat by reducing chronic fine sediment delivery and episodic inputs of road failure related sediment for coho and Chinook salmon, and steelhead and cutthroat trout in a selected section of Salmon Creek tributary to Humboldt Bay in Humboldt County. The objective is to save approximately 8,000 cubic yards of sediment from delivery by dispersing road runoff on 1.5 miles of road (28 cubic yards), reestablishing drainage patterns at 14 stream crossings (7,133 cubic yards) and removing or stabilizing sediment from 6 sites along the alignment (884 cubic yards).
- 2. Conduct work on the Salmon Creek Watershed. The project is located in Township 03N, Range 01E, Sections 7, 17 and 18 of the McWhinney Creek 7.5 Minute U.S.G.S. Quadrangle, 40.640626° N latitude and -124.103301° W longitude, as depicted in Exhibit C, Project Location Map, which is attached and made part of this agreement by this reference.
- 3. Decommission 1.5 miles of road thereby saving 8,000 cubic yards of sediment from delivery to Salmon Creek. Approximately 23,000 cubic yards of fill slope and stream crossing fill from approximately 14 stream crossings and 6 potential slide sites will be excavated and stored in stable locations. The following treatments will be implemented where appropriate:
 - Excavation of in-place stream crossings at locations where roads or landings were built across stream channels. This includes complete excavation of the fill, including the culvert or Humboldt log crossing so the original stream bed and side slopes are exhumed. A stream crossing excavation includes removing the culvert and the underlying and the adjacent fill material. Complete excavation of stream crossing fills, includes 100 year flood channel bottom widths and 2:1 or otherwise stable side slopes. When possible the excavated spoil will be stored at nearby stable locations where it will not erode. If there is a limited amount of stable storage locations at the excavation site the crossing fill material will be hauled off-site for storage.
 - Road surface treatments: 1) ripping of the surface of the road or landing using mechanical rippers to reduce surface runoff and improve revegetation; 2) in-place outsloping or the excavation of unstable side cast material that could fail and deliver sediment to a stream along the outside edge of a road prism or landing and the replacement of the spoil on the roadbed against the corresponding adjacent cutbank, or in close proximity of the site; 3) exported out-sloping which involves not placing the material against the cutbank so the material is end hauled to a spoil disposal site; 4) installation of cross drains or deep water bars at 50, 75, 100 or 200 foot intervals or as necessary at springs and seeps to disperse road surface runoff. The cross road drains

- provide road surface drainage and prevent the collection of concentrated runoff on the former roadbed.
- Seeding and mulching of all exposed soils which may deliver sediment to a stream.
 Woody debris will be concentrated on finished slopes adjacent to stream crossings.
 The standard for success is 80% ground cover for broadcast planting of seed, after a period of three years.
- 4. The Grantee will not proceed with on the ground implementation until all necessary permits and consultations are secured.
- 5. Sites which are expected to erode and deliver sediment to the stream are the only locations where work will be authorized for reimbursement under the terms of this agreement. Reimbursement will not be authorized for work done to improve aesthetics only.
- 6. Notify the Grant Manager a minimum of five working days before any fish bearing stream reaches are dewatered and the stream flow diverted. The notification will provide a reasonable time for Department personnel to supervise the implementation of the water diversion plan and oversee the safe removal and relocation of salmonids and other fish life from the project area. If the project requires dewatering of the site, and the relocation of salmonids, the Grantee will implement the following measures to minimize harm and mortality to listed salmonids:
 - Fish relocation and dewatering activities shall only occur between June 15 and October 31 of each year.
 - The Grantee shall minimize the amount of wetted stream channel dewatered at each individual project site to the fullest extent possible.
 - All electrofishing shall be performed by a qualified fisheries biologist and conducted according to the National Marine Fisheries Service, *Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act*, June 2000.
 - The Grantee will provide fish relocation data to the Grant Manager on a form provided by the Department of Fish and Game.
 - Additional measures to minimize injury and mortality of salmonids during fish relocation and dewatering activities shall be implemented as described in Part IX, pages 52 and 53 of the *California Salmonid Stream Habitat Restoration Manual*.
- 7. All road decommissioning will be done in accordance with techniques described in the *Handbook for Forest and Ranch Roads*, (PWA, 1994c.) and the *California Salmonid Stream Habitat Restoration Manual*, Third Edition, Volume II, Part X, January 2004. All road decommissioning and upgrade sites and techniques shall be approved by the Grant Manager before any equipment work takes place.
- 8. All habitat improvements will follow techniques described in the Third Edition, January 1998, of the *California Salmonid Stream Habitat Restoration Manual*, Flosi et al and the

California Salmonid Stream Habitat Restoration Manual, Third Edition, Volume II, Part XI, January 2004.

- 9. Work in flowing streams is restricted to June 15 through October 31. Actual project start and end dates, within this timeframe, are at the discretion of the Department of Fish and Game.
- 10. An annual report will be submitted each year, no later than November 15, detailing the work completed that field season. The annual report will include, but no necessarily be limited to the following where applicable:
 - Construction start and end dates
 - Percentage of the project completed in total to date
 - Dewatering and fish relocation data on DFG data sheet (to be provided by the DFG Grant Manager upon request)
 - Construction start and end dates for work to be implemented the following season

The annual report will also include on a site by site basis

- Road length segment decommissioned per road segment
- Sediment spoils volume estimate per road segment
- Upslope stream crossings decommissioned (not for fish passage)
- Sediment volume prevented from entering the stream per crossing
- Sediment spoils volume estimate per crossing
- Upslope area treated (sq ft) (landslides, bank stabilization)
- 11. Upon completion of the project, the Pacific Coast Fish, Wildlife and Wetlands Restoration Association shall submit two hard copies of a final written report and one electronic, *Microsoft Word* compatible, copy on CD. The report shall include, but not necessarily be limited to the following information:
 - Grant number
 - Project name
 - Geographic area (e.g., watershed name)
 - Location of work show project location using U.S.G.S. 7.5 minute topographical map or appropriately scaled topographical map
 - Geospatial reference/location (lat/long is preferred defined as point, line, or polygon)
 - Project start and end dates and the number of person hours expended
 - Total of each fund source, by line item, expended to complete the project, breaking down Grant dollars, by line item, and any other funding, including type of match (cash or in-kind service)
 - Expected benefits to anadromous salmonids from the project
 - A description and analysis of the restoration and planning techniques used
 - A description of the results of the project

- Labeled before and after photographs of restoration activities and techniques
- Specific project access using public and private roads and trails, with landowner name and address
- Complete as built project description
- Report measurable metrics for the project by responding to the restoration project metrics listed below.

Habitat Protection and Restoration Projects– **Reporting Metrics** (HU) (Report N/A to those that do not apply)

Habitat Projects: (all)

- Identify the watershed/sub-basin plan or assessment in which the project is identified as a priority.
- Name the priority habitat limiting factors identified in that plan that are addressed by the project
- Type of monitoring included in the project
 - o Design spec achieved
 - o Fish movement/abundance
- Number of stream miles treated/affected by the project within the project boundaries.

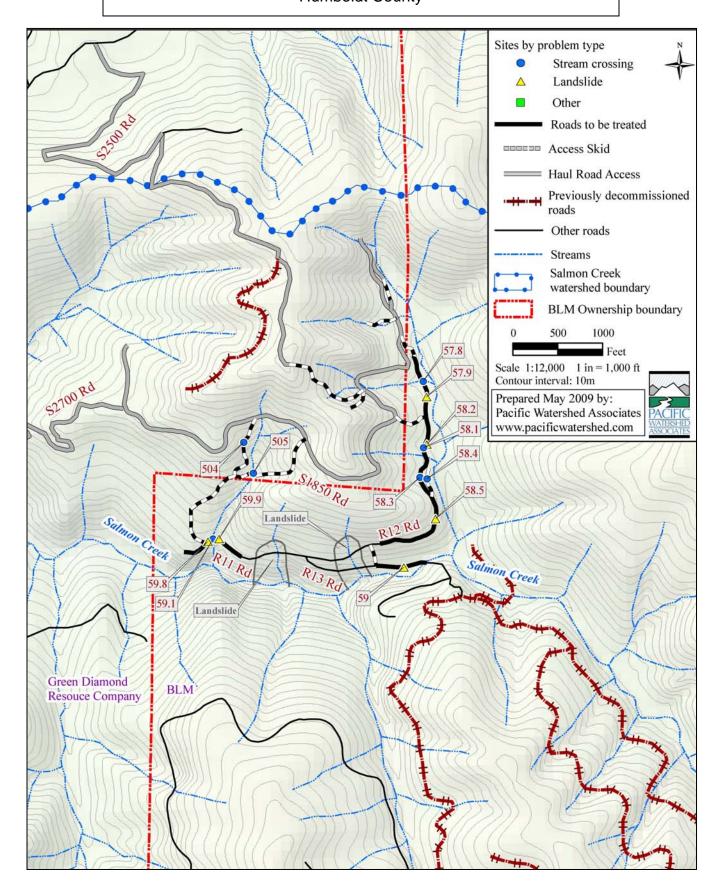
Upland Habitat Projects (HU)

- Number of actions (road decommission / upgrade)
- Total acres of upslope area treated.
- Total miles of road treated.
- Miles of road treated for road drainage system improvements.
- Miles of road decommissioned.
- Number of cubic yards of sediment saved from entering the stream.

Riparian Habitat Projects (HR, HS)

- Miles of stream treated overall, count stream reach only once.
- Miles of riparian stream bank treated, measure both sides of the bank.
- Total acres of riparian area treated.
- Acres of riparian area planted.
- Species scientific names of plants planted.
- 12. The Pacific Coast Fish, Wildlife and Wetlands Restoration Association will acknowledge the participation of the Department of Fish and Game, Fisheries Restoration Grant funds on any signs, flyers, or other types of written communication or notice to advertise or explain the 2009 GDRCo Salmon Creek Road Decommissioning Project.

Exhibit C 2009 GDRCo Salmon Creek Road Decommissioning Project Project Location Map T03N, R01E, S7, 17and 18; McWhinney Creek Quad Humboldt County



| | Common Name/Scientific Name | Element Code | Federal Status | State Status | GRank | SRank | CDFG or CNPS |
|----|---|--------------|----------------|--------------|--------|--------|-----------------|
| 1 | California clapper rail Rallus longirostris obsoletus | ABNME05016 | Endangered | Endangered | G5T1 | S1 | |
| 2 | California globe mallow Iliamna latibracteata | PDMAL0K040 | | | G3 | S2.2 | 1B.2 |
| 3 | Cooper's hawk Accipiter cooperii | ABNKC12040 | | | G5 | S3 | |
| 4 | Del Norte salamander Plethodon elongatus | AAAAD12050 | | | G4 | S3 | SC |
| 5 | Howell's montia Montia howellii | PDPOR05070 | | | G3G4 | S3 | 2.2 |
| 6 | Humboldt Bay owl's-clover Castilleja ambigua ssp. humboldtiensis | PDSCR0D402 | | | G4T2 | S2.2 | 1B.2 |
| 7 | Humboldt Bay wallflower Erysimum menziesii ssp. eurekense | PDBRA160E2 | Endangered | Endangered | G3?T1 | S1.1 | 1B.1 |
| 8 | Humboldt marten Martes americana humboldtensis | AMAJF01012 | | | G5T2T3 | S2S3 | SC |
| 9 | Kneeland Prairie pennycress Thlaspi californicum | PDBRA2P041 | Endangered | | G1 | S1.1 | 1B.1 |
| 10 | Lyngbye's sedge Carex lyngbyei | PMCYP037Y0 | | | G5 | S2.2 | 2.2 |
| 11 | Norris' beard moss Didymodon norrisii | NBMUS2C0H0 | | | G2G3 | S2.2 | 2.2 |
| 12 | Northern Coastal Salt Marsh | CTT52110CA | | | G3 | S3.2 | |
| 13 | Oregon coast paintbrush Castilleja affinis ssp. litoralis | PDSCR0D012 | | | G4G5T4 | S2.2 | 2.2 |
| 14 | Oregon goldthread Coptis laciniata | PDRAN0A020 | | | G4G5 | S2.2 | 2.2 |
| 15 | Oregon polemonium Polemonium carneum | PDPLM0E050 | | | G4 | S1 | 2.2 |
| 16 | Pacific fisher Martes pennanti (pacifica) DPS | AMAJF01021 | Candidate | unknown code | G5 | S2S3 | SC |
| 17 | Pacific gilia Gilia capitata ssp. pacifica | PDPLM040B6 | | | G5T3T4 | \$2.2? | 1B.2 |
| 18 | Pacific tailed frog Ascaphus truei | AAABA01010 | | | G4 | S2S3 | SC |
| 19 | Point Reyes bird's-beak Cordylanthus maritimus ssp. palustris | PDSCR0J0C3 | | | G4?T2 | S2.2 | 1B.2 |
| 20 | Siskiyou checkerbloom Sidalcea malviflora ssp. patula | PDMAL110F9 | | | G5T1 | S1.1 | 1B.2 |
| 21 | Sonoma tree vole Arborimus pomo | AMAFF23030 | | | G3 | S3 | SC |
| 22 | Upland Douglas Fir Forest | CTT82420CA | | | G4 | S3.1 | |
| 23 | Whitney's farewell-to-spring Clarkia amoena ssp. whitneyi | PDONA05025 | | | G5T2 | S2.1 | 1B.1 |
| 24 | Wolf's evening-primrose Oenothera wolfii | PDONA0C1K0 | | | G1 | S1.1 | 1B.1 |

| | Common Name/Scientific Name | Element Code | Federal Status | State Status | GRank | SRank | CDFG or CNPS |
|----|--|--------------|----------------|--------------|-------|-------|-----------------|
| 25 | alpine marsh violet Viola palustris | PDVIO041G0 | | | G5 | S1S2 | 2.2 |
| 26 | bald eagle Haliaeetus leucocephalus | ABNKC10010 | Delisted | Endangered | G5 | S2 | |
| 27 | beach layia Layia carnosa | PDAST5N010 | Endangered | Endangered | G2 | S2.1 | 1B.1 |
| 28 | bensoniella Bensoniella oregona | PDSAX02010 | | Rare | G3 | S2.2 | 1B.1 |
| 29 | black-crowned night heron Nycticorax nycticorax | ABNGA11010 | | | G5 | S3 | |
| | bristle-stalked sedge Carex leptalea | PMCYP037E0 | | | G5 | S2? | 2.2 |
| | chinook salmon - California coastal ESU Oncorhynchus tshawytscha | AFCHA0205S | Threatened | | G5 | S1 | |
| | coast cutthroat trout Oncorhynchus clarkii clarkii | AFCHA0208A | | | G4T4 | S3 | SC |
| | coast fawn lily Erythronium revolutum | PMLIL0U0F0 | | | G4 | S3 | 2.2 |
| | coast sidalcea Sidalcea oregana ssp. eximia | PDMAL110K9 | | | G5T1 | S1.2 | 1B.2 |
| 35 | coastal marsh milk-vetch Astragalus pycnostachyus var. pycnostachyus | PDFAB0F7B2 | | | G2T2 | S2.2 | 1B.2 |
| 36 | dark-eyed gilia Gilia millefoliata | PDPLM04130 | | | G2 | S2.2 | 1B.2 |
| 37 | double-crested cormorant Phalacrocorax auritus | ABNFD01020 | | | G5 | S3 | |
| 38 | foothill yellow-legged frog Rana boylii | AAABH01050 | | | G3 | S2S3 | SC |
| 39 | ghost-pipe Monotropa uniflora | PDMON03030 | | | G5 | S2S3 | 2.2 |
| 40 | giant fawn lily Erythronium oregonum | PMLIL0U0C0 | | | G5 | S2.2 | 2.2 |
| 41 | golden eagle Aquila chrysaetos | ABNKC22010 | | | G5 | S3 | |
| 42 | great blue heron Ardea herodias | ABNGA04010 | | | G5 | S4 | |
| 43 | great egret Ardea alba | ABNGA04040 | | | G5 | S4 | |
| 44 | green sturgeon Acipenser medirostris | AFCAA01030 | Threatened | | G3 | S1S2 | SC |
| 45 | hoary bat <i>Lasiurus cinereus</i> | AMACC05030 | | | G5 | S4? | |
| 46 | leafy-stemmed mitrewort Mitella caulescens | PDSAX0N020 | | | G5 | S4.2 | 4.2 |
| 47 | long-beard lichen <i>Usnea longissima</i> | NLLEC5P420 | | | G4 | S4.2 | |

| | Common Name/Scientific Name | Element Code | Federal Status | State Status | GRank | SRank | CDFG or CNPS |
|----|---|--------------|----------------|--------------|--------|--------|-----------------|
| 48 | long-eared myotis Myotis evotis | AMACC01070 | | | G5 | S4? | |
| 49 | maple-leaved checkerbloom Sidalcea malachroides | PDMAL110E0 | | | G3G4 | S3S4.2 | 4.2 |
| 50 | marbled murrelet Brachyramphus marmoratus | ABNNN06010 | Threatened | Endangered | G3G4 | S1 | |
| 51 | marsh pea Lathyrus palustris | PDFAB250P0 | | | G5 | S2S3 | 2.2 |
| 52 | minute pocket moss Fissidens pauperculus | NBMUS2W0U0 | | | G3? | S1.2 | 1B.2 |
| 53 | northern clustered sedge Carex arcta | PMCYP030X0 | | | G5 | S1S2 | 2.2 |
| 54 | northern meadow sedge Carex praticola | PMCYP03B20 | | | G5 | S2S3 | 2.2 |
| 55 | northern red-legged frog Rana aurora | AAABH01021 | | | G4T4 | S2? | SC |
| 56 | northern spotted owl Strix occidentalis caurina | ABNSB12011 | Threatened | | G3T3 | S2S3 | SC |
| 57 | osprey Pandion haliaetus | ABNKC01010 | | | G5 | S3 | |
| 58 | pallid bat Antrozous pallidus | AMACC10010 | | | G5 | S3 | SC |
| 59 | pink sand-verbena Abronia umbellata ssp. breviflora | PDNYC010N2 | | | G4G5T2 | S2.1 | 1B.1 |
| 60 | running-pine Lycopodium clavatum | PPLYC01080 | | | G5 | S4.1 | 4.1 |
| 61 | sandy beach tiger beetle Cicindela hirticollis gravida | IICOL02101 | | | G5T2 | S1 | |
| 62 | seacoast ragwort Packera bolanderi var. bolanderi | PDAST8H0H1 | | | G4T4 | S1.2 | 2.2 |
| 63 | seaside pea Lathyrus japonicus | PDFAB250C0 | | | G5 | S1.1 | 2.1 |
| 64 | sharp-shinned hawk Accipiter striatus | ABNKC12020 | | | G5 | S3 | |
| 65 | short-leaved evax Hesperevax sparsiflora var. brevifolia | PDASTE5011 | | | G4T2T3 | S2S3 | 1B.2 |
| 66 | snowy egret Egretta thula | ABNGA06030 | | | G5 | S4 | |
| 67 | southern torrent salamander Rhyacotriton variegatus | AAAAJ01020 | | | G3G4 | S2S3 | SC |
| 68 | summer-run steelhead trout Oncorhynchus mykiss irideus | AFCHA0213B | | | G5T4Q | S2 | SC |
| 69 | tidewater goby Eucyclogobius newberryi | AFCQN04010 | Endangered | | G3 | S2S3 | SC |
| 70 | tricolored blackbird Agelaius tricolor | ABPBXB0020 | | | G2G3 | S2 | SC |

| | Common Name/Scientific Name | Element Code | Federal Status | State Status | GRank | SRank | CDFG or CNPS |
|----|---|--------------|----------------|--------------|-------|-------|-----------------|
| 71 | western lily Lilium occidentale | PMLIL1A0G0 | Endangered | Endangered | G1 | S1.2 | 1B.1 |
| 72 | western pond turtle Actinemys marmorata | ARAAD02030 | | | G3G4 | S3 | SC |
| 73 | western sand-spurrey Spergularia canadensis var. occidentalis | PDCAR0W032 | | | G5T4? | S1.1 | 2.1 |
| 74 | western snowy plover Charadrius alexandrinus nivosus | ABNNB03031 | Threatened | | G4T3 | S2 | SC |
| 75 | white-footed vole Arborimus albipes | AMAFF23010 | | | G3G4 | S2S3 | SC |